

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/886,398	06/20/2001	Vinod Vasudevan	469802000120 4234		
7590 12/16/2004			EXAMINER		
Gurminder Singh, Ph.D. Chief Executive Officer & President NewsTakes, Inc. 1633 Bayshore Highway, Suite 380 Burlingame, CA 94010			DIEP, NHON THANH		
			ART UNIT	PAPER NUMBER	
			2613		
			DATE MAILED: 12/16/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application	Application No. Applicant(s)					
		09/886,39	98	VASUDEVAN ET AL.				
		Examiner		Art Unit				
	·	Nhon T Di	ер	2613				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to communication(s) filed on								
· · · · · · · · · · · · · · · · · · ·	• •	This action is n	on-final.					
3)□	_							
Disposition of Claims								
4)⊠ 5)□ 6)⊠ 7)□	 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-25 is/are rejected. 							
Applicati	on Papers							
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 20 June 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 								
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notice (3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449 or PTO/5 No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te	D-152)			

Page 2

Application/Control Number: 09/886,398

Art Unit: 2613

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 7, 18 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Neogi (US 6,483,851)

Neogi discloses a system for network transcoding of multimedia data flow comprising the same method for transmitting data streams to a client, comprising. receiving input data from said client, said input data indicative of a desired bit rate for delivery of a data stream (col. 2, ln. 16-46: bit rate = line 36); analyzing the data stream to determine at least one characteristic of the stream (col. 2, ln. 26-46); transcoding the data stream, based on said at least one characteristic and said desired bit rate, to provide a transcoded data stream having a bit rate substantially equal to the desired bit rate; and transmitting the transcoded data stream to the client (col. 2, ln. 47-53) as specified in claims 1, 7, 18 and 24.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2613

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-4 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi.

With regard to claims 3-4 and 20-21: As applied to claims 1 and 18 above, it is well known to one of ordinary skilled in the art at the time the invention was made that if the available bandwidth is insufficient to allow transmission of the data stream at said desired bit rate, an adjusted lower bit rate must be used to transcode image signal and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by adjusting the delivery bit rate to meet bandwidth requirement. Doing so would help to prevent overflow problem.

5. Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Wang et al (US 6,441,754).

As applied to claims 1 and 18 above, it is noted that Neogi does not particularly disclose that the input data comprises a desired delivery cost specified by said client, said method further comprising determining said desired bit rate from said desired delivery cost as specified in claims 2 and 19. Wang et al teaches the relationship between bit rate and cost of delivery. And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by deriving a bandwidth requirement based on the delivery cost as taught by Wang et al. Doing so would help to provide services as to fit end users' demand.

Art Unit: 2613

6. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Wang et al (US 6,441,754) and further in view of Sciammarella (US 6,281,940).

As applied to claim 2 above, it is noted that the combination of Neogi and Wang et al does not particularly disclose that the data stream further comprises an audio data stream and the system further comprises: a demultiplexer for receiving the data stream and separating the stream into the audio data stream and the video data stream; and an audio transcoder unit for receiving the audio data stream and encoding the audio data stream to reduce its bit-rate, wherein the audio data stream provides audio content for the MPEG video data stream; comprising a multiplexer that combines the encode audio data stream and the modified MPEG video data stream into a single data stream; further comprising a streamer that transmits the single data stream to a client; further including all output buffer to hold at least a portion of the single data stream prior to transmission to the client device; wherein the rate control unit determines an output data rate of the output buffer to determine an available bandwidth of a network used to transmit the single data stream as specified in claims 13-17. Sciammarella teaches how to decode (by using a demultiplexer) a typical MPEG encoded packetized data stream (put together by a multiplexer) that comprises an audio data stream and a video data stream (col. 3, In. 53 – col. 4, In. 7). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi and Wang et al by implementing a demultiplexer to decode an encoded packetized data stream into an audio data stream and a video data stream and

Art Unit: 2613

reencode these streams using different bit rate. Doing so would help to meet the users' bandwidth requirement.

7. Claims 5-6, 8-12, 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Anantharamu et al (US 2002/0136298).

As applied to claims 1 and 7 above, it is noted that Neogi further discloses the rate control unit further determines an available bandwidth of a network used to transmit said data stream (col. 2, In. 16-46) as specified in claim 10; However, Neogi does not particularly disclose that the data stream comprises a predictive coded video data stream and said step of transcoding comprises: analyzing said predictive coded video data stream to determine at least one characteristic of the video data stream; identifying at least one frame of the video data stream that can be replaced with a corresponding replicating frame, said replicating fame being substantially identical to a previously decoded frame; and replacing the at least one frame with its corresponding replicating frame as specified in claims 5, 8, 22 and 25 and wherein: said step of analyzing said predictive coded video data stream comprises categorizing a plurality of frames of said predictive coded video data into a plurality of fame types; and said step of identifying at least one frame of the video data stream comprises ranking said plurality of fames in accordance with their game type; and said step of replacing the at least one frame comprises first replacing those frames ranked as less important than other frames, prior to replacing said other frames as specified in claims 6, 9, 11 and 23. Anantharamu et al teaches a system to transcode predictive coded video data is provided. The system includes a client that receives a modified stream of video data, a content analysis and

Art Unit: 2613

description system that analyzes the stream of video data to determine characteristics of the stream, a <u>frame ranker</u> subsystem that assigns a numerical rank to each frame included in the stream of video data, a rate control subsystem that determines an available bandwidth of a network and of the client for transmitting the stream of video data to the client, and a transcoder subsystem that modifies the stream of video data to accord with the available bandwidth by replacing a frame with a previously <u>encoded</u> <u>frame which replicates</u> a previous decoded frame according to a <u>frame rank (Para. 10)</u>. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by modifies the stream of video data to accord with the available bandwidth by replacing a frame with a previously <u>encoded</u> frame which replicates.

With regard to claim 12: As applied to claim 9 which was rejected by the combination of Neogi and Anantharamu et al. It is noted that Neogi further disclose MPEG stream (col. 2, In. 56-61), it is noted that the combination does not particularly disclose transcoder unit provides a modified MPEG video data stream having a bit rate substantially equal to said desired bit rate as specified in claim 12. It is well known to one of ordinary skilled in the art at the time the invention was made that if the available bandwidth is insufficient to allow transmission of the data stream at the desired bit rate, an adjusted lower bit rate must be used to transcode image signal and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by adjusting the delivery bit rate to meet bandwidth requirement. Doing so would help to prevent overflow problem.

Application/Control Number: 09/886,398 Page 7

Art Unit: 2613

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Assuncao (US 6,226,328) discloses a transcoding apparatus for digital video networking.
- b. Lai et al (US 6,407,680) discloses a distributed on-demand media transcoding system and method.
- c. Lu et al (2002/0080877) discloses a method and system for video transcoding.
 - d. Linzer et al (US 6,141,447) discloses a compressed video transcoder.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND

9 Dec 2004

NHON DIEP PRIMARY EXAMINER